# ENHANCING

# OUR QUALITY OF LIFE

rowth Management - King County is a recognized leader in protecting and preserving natural resources and rural lands, while maintaining the vitality of our urban centers:

- Building and defending the Urban Growth Area Boundary, our "Wall against sprawl." Rural development has dropped to just 4 percent of overall county growth, keeping rural areas rural.
- Directing development to vital economic centers.
- Focusing investment on key infrastructure and services like transportation, clean water, and sewer capacity for urban areas.
- Preserving open space through acquisition and transfer of development rights.

**Award winning services** – The Department of Natural Resources and Parks has solidified King County's reputation as the region's foremost natural resource management agency. Its programs and projects have been distinguished with more than 130 national and regional awards since 2000.

#### **Planning for future water supply**

– Executive Sims and the Cascade Water Alliance, a consortium of eight cities and water districts in King County, have signed a memorandum of understanding to develop a regional water supply plan to meet the future needs of the region's environment, population and economy. The plan will prioritize water supplies to meet the region's needs, including reclaimed water, a drought-proof source that will be available in large quantities from King County's future Brightwater treatment plant.



Salmon recovery – King County is a founding member of Shared Strategy for Puget Sound. The consortium engages citizens, tribes, experts, agencies, environmental groups, and business leaders to build a cost-effective salmon recovery plan endorsed by the people living and working in the watersheds of Puget Sound. In 1998, Executive Sims and King County brought together Pierce and Snohomish counties to develop the Tri-County Endangered Species Act Response, a model on which much of today's watershed-based salmon conservation planning in Puget Sound is based.

#### Leadership in watershed-based planning

 King County is leading habitat planning for its major watersheds via the Water Resource Inventory Area process, which is funded through cooperative agreements between local jurisdictions in each watershed.

#### Protecting and restoring critical areas

- In the fall of 2004, after more than a year of outreach to citizens and deliberation by elected officials, King County updated its Critical Areas regulations to provide increased protections for drinking water, streams, wetlands and wildlife, and protections from flooding and erosion. The new science-based measures: King County's
Urban Growth
Area Boundary,
our "wall against
sprawl," is helping
to keep our rural
areas rural.

- Make farming and forestry easier than under previous regulations when a landowner files a stewardship plan.
- Are coupled with flexibility, tax incentives, and free technical advice to landowners to provide the right blend of measures that meet state law and maintain stream, river and riparian habitat functions while supporting the use of land for agriculture, forestry and low-intensity housing development.
- Seek to retain forest cover in rural basins.

**Community empowerment** – King County works with communities and recruits thousands of volunteers each year to complete channel improvement and riparian planting projects that are helping establish a strong foundation for future salmon conservation actions.

In 2004 King County:

- Recruited more than 4,365 volunteers who provided more than 25,394 volunteer hours on restoration and stewardship projects, and trail work.
- Held naturescaping workshops that taught 625 people how to garden and landscape naturally to protect water quality or improve habitat on their properties – all in financial partnerships with cities. To date nearly 2,000 county residents have been trained.

**Keeping family farms vital** – Building on solid growth management policies that protect rural areas, King County is working with farmers in agriculture districts via the Fish and Ditch Program, which allows them to improve field drainage and enhance rearing habitat for salmonids.

**Puget Sound Fresh** – A multi-county marketing program is helping consumers

identify locally-grown products. Begun in 1998 by King County, Puget Sound Fresh has helped the number of community farmers markets in King County grow from five to 20 in less than 10 years.

**Preserving open space** – An Executive priority, King County has dedicated millions of dollars to protect habitat through land acquisition. Last fall, Executive Sims signed a historic agreement to preserve 90,000 acres of timberland. Through the \$22 million purchase of development rights (a cost of just \$244 an acre), the Snoqualmie Forest will serve as a perpetual buffer against development to the Alpine Lakes Wilderness Area.

Saving Snoqualmie Falls forever – In partnership with the Cascade Land Conservancy, the City of Snoqualmie and Quadrant Homes, King County has permanently preserved the 150 acres of forestland around Snoqualmie Falls, securing the historic views of this sacred landmark for all future generations.

**Preston Vision** – Fearing the impacts of encroaching growth, King County worked with the citizens of this small rural timber town east of Seattle to create a partnership to preserve open space and the rural quality of life. The ambitious six-year, \$7.7 million effort successfully preserved open space in and around the historic lumber-mill town.

Executive Sims and hundreds of volunteers participated in a restoration project along the Sammamish River.





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Protecting citizens against flooding – King County's efforts to protect people and property in flood-prone areas have earned it the highest Community Rating System (CRS) rating of any county in the United States, which lowers flood insurance rates for unincorporated residents. Last fall, King County, the City of Snoqualmie, and the U.S. Army Corps of Engineers celebrated completion of a multi-million dollar river-widening project that will significantly reduce the threat of devastating floodwaters to Snoqualmie, the most flood-prone community in the state.

**Disposing of garbage** – King County efficiently and safely handles over a million tons of the region's garbage every year. Trash is processed by our eight transfer stations and two drop boxes and disposed of in our state-of-the-art Cedar Hills Landfill. We also provide award winning and innovative recycling programs that move beyond paper and glass to reusing computers and cell phones. All of this is accomplished with some of the lowest rates in the region.

Investing in innovative, sustainable energy sources – Almost a million tons of garbage is deposited at the Cedar Hills Regional Landfill each year. Rather than burn off the methane gas produced by decomposing garbage, the county established a public private partnership to convert the gas into energy. The capital project, at no cost to ratepayers, will generate enough power for 16,000 homes, cut county energy costs by \$80,000 annually and create

a new revenue stream for the county, which will sell the gas for at least \$400,000 annually.

Leading the way on sustainable building -In 2001, Ron Sims signed an Executive order requiring new buildings and substantial renovations to comply with national environmental standards set forth in the Leadership in Energy and Environmental Design or LEED™ rating system. In early 2004 the council passed a Green Building Ordinance, based on this order, making King County one of the first local governments to codify its green building program. King Street Center was the most eco-friendly building in the region when it opened in 1999. It has saved more than \$200,000 in energy costs since it opened, and through the building's water reclamation system, the county has saved an estimated 1.4 million

The county was instrumental in creating the Built Green program with the Master Builders Association and Snohomish County. Since the program launched in 2005, over 5,000 homes have been certified in the program representing 17 percent of the market share of new construction.

gallons of water a year.

#### Keeping toxins out of our environment

- The county has partnered with area recyclers and launched a public awareness effort encouraging people to recycle their electronics rather than throw them away. The county created the Take It Back Network comprised of area recyclers through which 55,000 electronics were collected and their reusable parts recycled. Hazardous materials are disposed of properly.

#### Developing a world-class trail system

– The county has invested over \$20 million to acquire, develop and restore a system of 175 miles of trails. This includes acquiring roughly 525 acres of new trail facilities and almost 20 miles of new developed trail. King County will begin construction on the

final link of the East Lake Sammamish Trail within the next year; a crucial link between the Burke-Gilman/Sammamish River Trail and the Mountains to Sound Greenway.

#### Creating excellent athletic facilities

Under Sims' 101 ballfields initiative, King
 County funded the county-wide renovation
 of fields that today provide excellent venues
 for little league, fast pitch and casual players.

Working with the community to improve parks – The county partners with corporate, non-profit and community organizations as well as individuals to plant trees, remove noxious weeds, clean playgrounds, and provide school-based programs. In 2004 alone 60,000 hours of volunteer service were provided to King County parks.

**Supporting youth sports** – Since 1996 King County has awarded 178 Youth Sports Facilities Grants totaling \$6,426,949 to support youth sports in the region. The grants have been used to build new playgrounds, restore ball fields and create new skate parks.

Brightwater Treatment Plant – The county is designing a new state-of-the-art regional wastewater treatment plant, called Brightwater, to protect public health, water quality and the environment for generations to come. Once completed in 2010, Brightwater will treat up to 36 million gallons of sewage a day from people in north King and south Snohomish counties. As our region continues to grow, the plant will be expanded to treat 54 million gallons a day. To complete the facility by 2010, the county expects to begin construction in 2006. So far:

- A site north of Woodinville was chosen after years of studies, environmental review, and discussions with citizens, local governments and businesses.
- An environmental impact statement was issued telling decision-makers and the public about environmental impacts and potential mitigation

- measures for the proposed project.
- Nearly all property has been acquired, and many major permits have been secured.
- The design of the facility will be completed by early 2006.
- The new facilities will include a treatment plant, conveyance (pipes and pumps that take the wastewater to and from the plant), and an outfall in Puget Sound. The conveyance system consists of about 14 miles of pipeline built in underground tunnels. These tunnels will be from 40 to 440 feet below the surface. The marine outfall will include a 500-foot-long diffuser installed at a depth of 600 feet, nearly a mile offshore.

The plant design will integrate odor control, landscaping, architecture, wildlife habitat and art. Community-created design concepts have been key to making a facility that meets the needs of the region and enhances the local community. Using "membrane bioreactor" technology, a technology commonly used in drinking water plants, Brightwater will treat most of the wastewater to a very high standard. While Brightwater won't produce drinking water, it will produce water that meets the state's Class A standard for reclaimed water, creating a drought-proof supply of irrigation and industrial

process water.

Completing a 1.2-mile-long tunnel to control Lake Union, Elliott Bay overflows – From the south Lake Union neighborhood of Seattle to Elliott Bay, construction below Mercer Street created a 15-foot-diameter tunnel. The tunnel, completed in 2002, will store 7.2 million gallons of combined stormwater and wastewater until it can be treated. When it begins operating in mid-2005, the \$138.5 million Denny Way/Lake Union project will control all combined sewer overflows into Seattle's Lake

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Union and the county's largest CSO outfall in Myrtle Edwards Park on Elliott Bay.

Building a storage tunnel to prevent Lake Washington overflows – A combined sewer overflow control project in south Seattle reached an important milestone in 2003 when tunnel boring was completed for a 4-million-gallon wastewater storage and treatment tunnel. The 3,100-foot-long tunnel is nearly 15 feet in diameter and up to 109 feet deep. In mid-2005, the \$77.7 million Henderson/Martin Luther King Way project will bring the last uncontrolled county CSO into Lake Washington into compliance.

### Controlling industrial waste discharges

- King County's 35-year-old Industrial Waste Program continues to work with large and small businesses to prevent harmful wastes from entering the wastewater treatment system and make our biosolids safe for recycling. In recent years, the program has also worked with its regional and local partners to identify and control sources of pollutants to the Duwamish Waterway.

Cleaning up contaminated sediment in lower Duwamish Waterway – To protect fish, the environment and public health, a King County contractor removed an estimated 66,000 cubic yards of contaminated sediment from the Duwamish between November 2003 and March 2004. The project resulted in the cleanup of 7 acres of the Duwamish and removal of about 400 pounds of polychlorinated biphenyls, or PCBs, from the river.

**Safely treating wastewater** – In 2004, King County's network of 42 pump stations, 335 miles of sewer line and two regional treatment plants safely conveyed and treated an average of 183 million gallons of wastewater per day.

**Solving wastewater treatment problems on Vashon Island** – The Vashon Sewer District contracted with King County in 1999 to

take over operation of it's troubled wastewater treatment system. King County began a construction upgrade of the aging treatment plant in early 2005 to ensure future clean and safe operation.

Selecting city's property for new Carnation
Treatment Plant – Planning ramped up in
2004 for siting a new wastewater treatment
plant requested by the City of Carnation.

## Generating electricity from digester gas

- With the help of federal grant funding, the world's largest molten-carbonate fuel cell demonstration project at King County's South Wastewater Treatment Plant in Renton continued to test the promise of fuel cells to supply energy with little air pollution. A second project at South Plant is under way to expand the plant's ability to convert gas from its solids digesters to electricity by using turbines. These projects are expected to make the facility largely power-independent. Similar innovations are planned for the new Brightwater facility.

Using biosolids to enhance agriculture, forestry, landscaping – King County's Wastewater Treatment Division seeks opportunities to recycle byproducts of its wastewater treatment system in beneficial ways. The solid byproduct of biosolids is used to enhance soil in agriculture, forestry and landscaping.

**Reclaiming wastewater for safe use** – The county's Wastewater Treatment Division produces more than 290 million gallons a year of reclaimed water for landscape irrigation and

industrial processes.
To help make wellresearched decisions
about reclaiming
wastewater, King
County in 2001
launched an
Advanced Technology
Demonstration
Project at the West

Drought-proof water supply that frees up clean water for people and fish.

